

Assignment 2

Textbook Assignment: "Automatic Opening Devices," and "NES-12 Personnel Parachute System." Pages 2-1 through 2-15 and 3-1 through 3-15.

Learning Objective: *Recognize design requirements and component functions of the Model 7000 automatic parachute ripcord release assembly, and identify procedures pertinent to maintaining, inspecting, arming, and disarming it, including safety precautions to be observed.*

- 2-1. Working with an automatic parachute ripcord release assembly is the same as working with what loaded firearm?
1. .22-caliber pistol
 2. .38-caliber pistol
 3. .45-caliber pistol
 4. Shotgun
- 2-2. Automatic parachute ripcord release assemblies that are preset to 14,000±1,000 feet are identified by which of the following color labels?
1. White
 2. Green
 3. Red
 4. Black
- 2-3. While the firing mechanism is installed in a parachute, it is locked by which of the following parts?
1. The arming pin
 2. The sear
 3. The aneroid mechanism
 4. The locking pin
- 2-4. Before the preset altitude has been reached, the firing mechanism is prevented from firing by which component(s) of the release assembly?
1. The actuator stop
 2. The gear assembly lock
 3. The firing safety lock
 4. The aneroid and sear mechanism
- 2-5. What action results from the forward movement of the piston and its attached power cable?
1. The main powder charge in the cartridge explodes
 2. The arming cable is pulled below the preset altitude
 3. The aneroid sear releases the firing mechanism
 4. The locking pins are pulled and the parachute opening sequence begins
- 2-6. As the piston is forced forward in the barrel, the power cable travels what total number of inches?
1. 2.5 inches
 2. 2.0 inches
 3. 3.5 inches
 4. 3.75 inches
- 2-7. If any defect is found while inspecting a ripcord release assembly, what action should you take?
1. Salvage any workable parts from the assembly
 2. Affix a tag to the assembly denoting "NOT FOR USE"
 3. Remove and scrap the entire assembly
 4. Return the assembly to its manufacturer

- 2-8. What manual gives you information on the cartridge service life/total life?
1. NAVAIR 11-100-1.1
 2. NAVAIR 11-3710
 3. NAVAIR 11-13-1-6.9
 4. NAVAIR 11-10-100
- 2-9. Maintenance on any automatic ripcord release assembly in service must be performed at what times?
1. Every other time its parachute assembly is repacked
 2. Only at the original issue inspection
 3. Every time its parachute assembly is repacked
 4. Every third time its parachute assembly is repacked
- 2-10. What is the first step in performing the normal inspection and maintenance on an automatic ripcord release?
1. Remove the aneroid
 2. Disarm it
 3. Remove the power cable
 4. Remove the sear
- 2-11. All cover and power cable housings and the receiver and barrel assemblies have a serial number. If you find that a serial number for the cover housing has the same serial number as the receiver assembly, you should report this finding on an Unsatisfactory Material Condition Report.
1. True
 2. False
- 2-12. When inspecting the leaf springs you find that the tamper dot on the retaining screw is missing. You must torque the screw to what value?
1. 10 to 12 inch-pounds
 2. 12 to 14 inch-pounds
 3. 14 1/2 to 15 1/2 inch-pounds
 4. 15 to 16 inch-pounds
- 2-13. When you inspect the Teflon gasket seal, in what position should the cup side be facing?
1. The piston
 2. Away from the piston
 3. The aneroid seal
 4. The aneroid detector
- 2-14. The automatic parachute ripcord release test set has a test chamber that can withstand a vacuum equivalent to what altitude?
1. 20,000 feet
 2. 30,000 feet
 3. 40,000 feet
 4. 50,000 feet
- 2-15. Before using the test set, you must ensure it has what altimeter barometric pressure reading?
1. 29.29 inches
 2. 29.87 inches
 3. 29.90 inches
 4. 29.92 inches
- 2-16. To test the firing of the automatic ripcord release, you must use a dummy cartridge; failure to use this cartridge may result in damage to the
1. firing pin
 2. arming pin
 3. firewall
 4. gasket seal
- 2-17. If you were going to test a ripcord release that is set to fire at 14,000±1,000 feet, you would run the test chamber to what altitude?
1. 15,000 feet
 2. 16,000 feet
 3. 18,000 feet
 4. 25,000 feet
- 2-18. By using the descent toggle, the test chamber will simulate a descent of how many feet per second?
1. 100 to 150
 2. 150 to 200
 3. 175 to 200
 4. 200 to 250

2-19. When you test the Model 7000 actuator, how many firing checks are made?

1. One
2. Two
3. Three
4. Four

2-20. What color lacquer is used for the tamper dot on the locking screw?

1. Red
2. Green
3. White
4. Orange

Learning Objective: *Recognize design requirements and component functions of the ballistic spreading gun, and identify procedures pertinent to maintaining, inspecting, and changing the cartridges.*

2-21. The spreader gun consists of how many slugs, pistons, and retainers?

1. 7
2. 14
3. 21
4. 28

2-22. How is the cartridge installed in a spreader gun?

1. Threaded into the breech
2. Loaded into the barrel assembly
3. Loaded into a piston
4. Threaded into a piston

2-23. What prevents accidental firing of the cartridge during handling?

1. A safety lanyard
2. A safety cable
3. A safety pin
4. A safety lock

2-24. What holds the two lines and loop in the channels of each slug?

1. A rubber band
2. A safety tie
3. A rock washer
4. A cover plate

2-25. When the cartridge fires, the slugs are propelled outward how many degrees?

1. 360
2. 180
3. 90
4. 45

2-26. At a high-speed ejection, the spreading action of the slugs forms what size diameter mouth at the skirt hem?

1. 10 feet
2. 8 feet
3. 6 feet
4. 4 feet

2-27. At a low-speed ejection, the spreading action of the slugs forms what size diameter mouth at the skirt hem?

1. 10 feet
2. 8 feet
3. 6 feet
4. 4 feet

2-28. After the firing pin is withdrawn, the firing lanyard exerts how many pounds of tension on the fail-safe assembly sleeve?

1. 15 to 24 pounds
2. 24 to 35 pounds
3. 25 to 38 pounds
4. 30 to 45 pounds

2-29. If the date the sealed container was opened is not available, the installed life of the cartridge is computed from the date of manufacture as determined from the lot number.

1. True
2. False

2-30. The spreader gun cartridge is treated as what class ammunition?

1. A
2. B
3. C
4. D

2-31. The lanyard retaining pin must be removed when replacing the upper retaining cord.

1. True
2. False

2-32. If you have to remove a damaged or defective spreading gun, which of the following steps apply?

1. Slip all the suspension lines and attached loops from under the plates
2. Disconnect the retaining cord from the vent lines
3. Both 1 and 2 above
4. Cut the retaining cord at the apex

2-33. When performing a firing pin release test, the pull force must be in what range?

1. 15 to 20 pounds
2. 25 to 38 pounds
3. 30 to 48 pounds
4. 35 to 50 pounds

2-34. What is used to clean the cartridge chamber and threads of a spreading gun?

1. Denatured alcohol
2. Dry-cleaning solvent
3. WD-40
4. Warm, soapy water

2-35. What is used to mark information on a spreading gun cartridge?

1. Red marking fluid
2. Green marking ink
3. White marking fluid
4. Black marking ink

2-36. When a cartridge is properly installed into the chamber, the base of the cartridge should be in what approximate position in relation to the edge of the chamber?

1. Two threads above the top edge
2. Even with the top edge
3. Two threads below the bottom edge
4. Even with the bottom edge

2-37. What is the torque value of the cartridge when it is placed into the chamber?

1. 97±12 inch-pounds
2. 70±10 inch-pounds
3. 54±8 inch-pounds
4. 84±12 inch-pounds

Learning Objective: *Recognize component functions and operating characteristics of the NES-12 personnel parachute system.*

2-38. When an aircrew member ejects from an aircraft, what causes the external pilot parachute to open?

1. The spreading gun
2. The automatic ripcord release
3. A static line
4. The external pilot chute release assembly

2-39. At speeds up to 90 knots, the tristage pilot chute does which, if any, of the following?

1. Inflates fully
2. Reduces to 18 inches
3. Reduces to 24 inches
4. None of the above

2-40. At speeds between 90 and 250 knots, the tristage pilot chute does which of the following?

1. It reduces in size to 18 inches
2. It reduces in size to 24 inches
3. It reduces in size to 30 inches
4. It inverts

2-41. The suspension lines are pulled from the container by which of the following parachute components?

1. External pilot chute
2. Spreading gun
3. Internal pilot chute
4. Main canopy

2-42. If the spreading gun fails to fire, what permits the canopy to open?

1. The slugs separate from the gun at full suspension line stretch
2. The slugs have breakaway cover plates
3. The override disconnect releases the slugs

2-43. The NES-12 prsonnel parachute system utilizes what type of canopy?

1. 26-foot
2. 26-foot modified
3. 20-foot modified
4. 32-foot

2-44. The shoulder restraint system for the NES-12 is located on which of the following parachute assemblies?

1. Riser assembly
2. Container assembly
3. Harness assembly

Learning Objective: *Identify procedures for inspecting, rigging, and packing the NES-12 parachute assembly.*

2-45. When a step is followed by "(QA)" in the rigging and packing procedure, all work stops until a quality assurance inspector performs the requirements listed at the end of the applicable procedures.

1. True
2. False

2-46. How do you obtain a complete NES-12 parachute assembly to place into service?

1. Order the complete assembly
2. Order each part separately
3. Order a container and use spare parts to assemble a complete NES-12

2-47. If you are in the process of repacking a parachute and it is time to secure, what action must you take to complete the repacking procedures?

1. Complete the repack before you secure
2. Secure and restart the procedure the next day from step one
3. Either 1 or 2 above, depending upon the circumstances
4. Lay a covering over the assembly and start at that step the next day

2-48. To attach the internal pilot parachute to the NES-12 assembly, you must use what type of knot(s)?

1. Bowline
2. Square
3. Clove hitch and a half hitch
4. Larks head

2-49. When positioning the spreading gun for installation onto a parachute canopy, it is placed between which of the following suspension lines?

1. 1 through 14 and 15 through 28
2. 1 through 28 and 14 through 15
3. 21 through 7 and 28 through 8
4. 7 through 14 and 28 through 21

2-50. To route the retaining cord through the main canopy, what, if anything, is used?

1. Type I suspension line
2. Type II suspension line
3. Type III suspension line
4. Nothing

2-51. When positioning the spreading gun at the skirt hem, the gun should be rotated so that which labeled slug is facing up?

1. 28-1
2. 14-13
3. 12-13
4. 1-28

2-52. What torque value is used to secure the slug plates to the spreading gun?

1. 5±1/2 pound-inches
2. 7±1/4 pound-inches
3. 10±1 pound-inches
4. 6±1/2 pound-inches

2-53. What tool is used to push the sear into the barrel of the override disconnect?

1. A temporary locking pin
2. A bodkin
3. A straight slot screwdriver
4. A jewelers wrench

- 2-54. The tacking that holds the override disconnect to the pilot parachute connector strap is tacked how far above the knot securing the connector strap to the vent lines?
1. 5±1/2 inches
 2. 4±1/2 inches
 3. 3±1/4 inches
 4. 2±1 inches
- 2-55. What type of thread/cord is used to tack the override disconnect to the pilot chute connector cord?
1. E thread
 2. FF thread
 3. 3-cord
 4. 6-cord
- 2-56. To stow the firing lanyard into the stowage sleeve, you must use what tool(s)?
1. A packing hook
 2. Type I nylon line and a bodkin
 3. Rubber bands
 4. Type III nylon line and a screwdriver
- 2-57. What size of thread is used to tack the second lanyard bight to the stowage sleeve?
1. A nylon thread
 2. E nylon thread
 3. F nylon thread
 4. FF nylon thread
- 2-58. Which of the following manuals would you use to ensure you are installing the proper arming cable and time-delay cartridge?
1. NAVAIR 13-1-6.5
 2. NAVAIR 13-1-6.4
 3. NAVAIR 13-1-6.3
 4. NAVAIR 13-1-6.2
- 2-59. The breakcords used to secure the lift web protector flaps over the risers are constructed from
1. three-strand cord
 2. four-strand cord
 3. FF thread
 4. E thread
- 2-60. What type of knots are used to secure the breakcords?
1. Lark's head
 2. Surgeon's knot and a square knot
 3. Two half-hitches
 4. Two half-hitches and a clove-hitch
- 2-61. The connector link ties are constructed from (a) how many lengths and (b) what type cord?
1. (a) Two 12-inch
(b) 100-pound nylon cord
 2. (a) Two 14-inch
(b) Type I cotton cord
 3. (a) Two 24-inch
(b) 150-pound nylon cord
 4. (a) TWO 16-inch
(b) Type III cotton cord
- 2-62. The loop used in the connector link ties is tied with what type knot(s)?
1. Overhand knot
 2. Lark's head knot
 3. Bowline and overhand knot
 4. Lark's head and overhand knot
- 2-63. When you install the release lanyard and ripcord assemblies, you must ensure that the baseplate clamp is in what position?
1. To the right of the hex nut locking pin
 2. Over the locking pin prior to installing the hex nut
 3. To the left of the hex nut locking pin
 4. Over the hex nut prior to installing the locking pin

2-64. When routing the firing lanyard through the lanyard guide grommet, where is the 36-inch mark on the lanyard placed?

1. Under the bar on the connector link
2. Over the bar on the connector link
3. Under the cross-connector strap
4. Over the cross-connector strap

2-65. When routing the firing lanyard through the suspension lines, it is routed between what lines?

1. 1 and 28
2. 14 and 15
3. 7 and 8
4. 16 and 15